

Waste Management and Radiation Control Board Meeting
Utah Department of Environmental Quality
195 North 1950 West (Conference Room #1015) SLC, Utah
November 12, 2015
1:30 p.m.

Board Members Present: Richard Codell, Marc Franc, Steve McIff, Brett Mickelson, Dennis Riding, Vern Rogers, Shane Whitney and Dwayne Woolley

Board Members Absent: Jeremy Hawk and Shawn Milne

Staff Members Present: Scott Anderson, Brent Everett, Deborah Ng, Don Verbica, Tom Ball, Otis Willoughby, Ed Costomiris, Dean Henderson, Michelle Weis, Rick Page, Arlene Lovato, Jerry Rogers, Elisa Smith, Raymond Wixom, Ralph Bohn, Rusty Lundberg

Others Present: Les Ashwood, Lonnie Brown, Tim Orton, Karen Langley, Ashley Soltysiak, Craig Jones

I. Call to Order.

Scott Anderson welcomed all in attendance and called the meeting to order at 1:35 p.m. Scott thanked the Board members for their attendance and participation in the orientation/training meeting that preceded the Board meeting.

II. Introductions of Board Members.

Each board member introduced himself and his position on the Board.

Dwayne Woolley is employed by Trans-Jordan Cities and is one of two non-federal government representatives. Mark Franc is employed by Waste Management and represents the private solid waste disposal industry. Brett Mickelson is a professional engineer and fills the Utah-licensed engineer position. Dennis Riding is employed by Maverik Incorporated and represents the fuel industry. Steve McIff has a private dental practice in Pleasant Grove and represents the public. Vern Rogers is employed by EnergySolutions and represents the radioactive waste management industry. Shane Whitney is employed by Clean Harbors and represents the private hazardous waste disposal industry. Richard Codell, a consultant in the nuclear industry and a former member of the Radiation Control Board represents the uranium milling industry.

Scott Anderson excused Shawn Milne, Tooele County Commissioner, one of two non-federal government representatives on the Board and Jeremy Hawk, Radiation Safety Officer for IHC, representing the field of radiation safety.

Mr. Anderson also informed the Board that Danielle Endres has been nominated by the Governor to serve on the Board, but is awaiting confirmation by the Senate; which is anticipated to take place on November 18, 2015. Ms. Endres will fill the position designated for a nongovernmental organization that represents community interests and does not represent industry interests.

III. Election of Board Chair and Vice Chair.

Scott Anderson conducted the elections for Board Chair and Vice Chair.

It was moved by Shane Whitney and seconded by Dennis Riding and UNANIMOUSLY CARRIED to elect Dwayne Woolley to serve as the Board Chair. Brett Mickelson commented that Mr. Woolley would be an excellent chairman. Mr. Mickelson noted, however, that it may take away from his thorough review of the meeting minutes because he will be conducting the meetings instead of checking the minutes for accuracy.

It was moved by Shane Whitney and seconded by Steve McIff and UNANIMOUSLY CARRIED to elect Dennis Riding as the Board's Vice-Chair.

(No other Board members expressed an interest in serving as either Board Chair or Vice-Chair.)

IV. Underground Storage Tanks Update.

Brent Everett, Director of the Division of Environmental Response and Remediation (DERR), explained that the DERR has responsibility for the Underground Storage Tank (UST) program which has rules that come before the Board for approval. He informed the Board that the DERR will regularly report on the financial assurance mechanism, the Petroleum Storage Tank (PST) Trust Fund, which is used by more than 76% of the UST facilities in Utah.

The cash balance of the PST Trust Fund at the end of September 2015 was \$16,211,196.00. The preliminary estimate for the cash balance of the PST Trust Fund for the end of October 2015 is \$16,190,526.00. The cash balance of the PST Trust Fund will experience fluctuations as claims are paid out. There were no questions regarding the PST Trust Fund balance.

Mr. Everett informed the Board that the rule changes implemented as part of the regulatory review of the Federal Underground Storage Tank (UST) Rules were published in the Federal Register on July 15, 2015. The rule changes will require Utah rule revisions to coincide with new federal requirements. Most of the anticipated changes have already been implemented in Utah but in order to conform with the new Federal Rules, there will be additional rule changes proposed to the Board for adoption.

V. Administrative Rules

a. Final adoption of proposed rule changes R315-15-18, Standards for the Management of Used Oil, Polychlorinated Biphenyls (PCBs), as published in the July 15, 2015 edition of the Utah State Bulletin (Board Action Item).

Ralph Bohn, Planning and Technical Support Section Manager, reviewed the request for final adoption of proposed changes to Used Oil Rule R315-15-18 of the Utah Administrative Code.

The used oil rules were modified in the fall of 2014. Following a review of the corresponding federal rules, the Director determined that the reference in R315-15-18 to certain concentrations of PCBs should be changed. Specifically, the federal rules regulating PCBs (40 CFR 761) have several levels of PCB concentrations and different requirements for each concentration. Used oil containing less than 50 ppm PCBs that is recycled in a manner other than being burned for energy recovery generally is excluded from TSCA requirements except for issues such as dilution.

Used oil with a PCB concentration of 50 ppm or greater is regulated under TSCA and its use and disposal are restricted. Also, the proposed change to the rule clarifies that the assumptions in 40 CFR 761.2 of the concentration of PCBs and PCB items are appropriate while in use or stored for reuse but when the PCBs are disposed or stored for disposal, the actual PCB concentration must be known. The proposed change clarifies that the actual PCB concentration is obtained from laboratory analysis. The used oil rules adopted in 2014 specified 2 ppm where 50 ppm should have been specified.

The draft rule changes were published in the July 15, 2015 in the Utah State Bulletin to begin the public comment period. No comments were received. The Director recommends that the Board adopt the proposed rule changes and set an effective date of November 12, 2015.

It was moved by Dennis Riding and seconded by Mark Franc and UNANIMOUSLY CARRIED to approve for final adoption the proposed changes to R315-15-18, Standards for the Management of Used Oil, Polychlorinated Biphenyls (PCBs), as published in the July 15, 2015 edition of the Utah State Bulletin with an effective date of November 12, 2015.

VI. Hazardous Waste Section.

a. Proposed Stipulation and Consent Order between the Board and Emerald Services, Inc. (Board Action Item).

Deborah Ng, Hazardous Waste Section Manager, reviewed the proposed Stipulation and Consent Order (SCO) to resolve Notice of Violation and Compliance Order (NOV/CO) No. 1307015 issued to Emerald Services Inc. on April 24, 2013.

Emerald Services is an environmental services company with facilities located at 2450 South 800 West and 650 West 500 South in Salt Lake City, Utah. Emerald Services collects, processes, stores and markets used oil under the provisions of R315-15 of the Utah Administrative Code and State-issued Permits UOP-090, UOP-084, UOP-087 and Marketer Registration UOR-077. (The NOV/CO was included in the Board packet.)

All violations cited in the NOV have been corrected by the facility. The SCO includes a penalty of \$73,274.00. Emerald will pay \$26,782.00 in cash and the remaining amount will be separated into two Supplemental Environmental Projects (SEPs) totaling \$46,492.00. The first SEP of \$26,492.00 includes installation of a remote level monitoring system for the bulk used oil storage tanks in Tank Farm #1, and the second SEP includes a \$20,000 donation made to the Utah Public Health Laboratory for new laboratory equipment to process environmental samples.

The public comment for this SCO began on June 11, 2015 and ended on July 10, 2015. No public comments were received. The Director recommends approval of the SCO with Emerald Services.

Marc Franc noted this issue was discussed during the last meeting of the Solid and Hazardous Waste Control Board and felt it was appropriate to re-state his concerns regarding the settlement. Mr. Franc expressed concern that the penalty does not take into account the economic benefit gained by the company's non-compliance.

Ms. Ng responded that the penalty calculation spreadsheet provided in the Board packet addresses economic benefit. Mr. Franc had seen the spreadsheet but did not see an increase in the penalties for economic benefit and he believes an unfair substantial business advantage was gained whether intentional or not as there were numerous violations noted.

Scott Anderson clarified that the Division considers economic benefit in every settlement. Mr. Anderson also explained the difficulty in calculating the dollar value of the economic benefit for each violation when the Division does not have access to the company's business costs. Assumptions can be made but they often lead to disproportionately high penalties so the Division tries to find a balance. Mr. Anderson reminded the Board that it can refuse to approve the settlement and direct the Division to re-negotiate with the company.

Mr. Franc asked how it was decided what portion of the penalty was to be paid in cash. Ms. Ng explained that after the costs of the SEPs were calculated, the remaining portion of the total penalty would be paid in cash.

Dwayne Woolley expressed similar concerns and thought it would be helpful to have a history of compliance issues at the facility. Board members asked if a rule change would be necessary to address the issue of adding economic benefit to penalties. Mr. Anderson stated that a rule change is not necessary since the Division already considers economic benefit in settlements. The Division will look at ways to provide more detailed information to the Board in support of future settlements to address this concern.

It was moved by Dennis Riding and seconded by Brett Mickelson and majority carried to approve the proposed Stipulation and Consent Order between the Board and Emerald Services, Inc. Mark Franc opposed the motion.

b. Clean Harbors, Grassy Mountain, LLC request for a site-specific treatment variance to stabilize a High Mercury- Subcategory Inorganic waste stream that has the characteristic waste code D009 (Board Action Item).

Ed Costomiris, Environmental Scientist, provided a power point presentation as background for this request. (A copy of the presentation is provided in the meeting minutes.).

Clean Harbors Grassy Mountain, LLC has requested a site-specific treatment variance from the Utah Hazardous Waste Management Rules. The Grassy Mountain Facility seeks authorization to stabilize a High Mercury – Subcategory Inorganic waste stream that has the characteristic waste code D009. The treated waste will then be disposed in a hazardous waste cell at the facility.

The Grassy Mountain Facility proposes to stabilize and dispose of a mercury waste stream that is generated at the Clean Harbors Aragonite Facility and carries the waste code for High Mercury-Inorganic Subcategory along with many other waste codes. The waste stream is generated by the spray dryer at the Aragonite Facility. The technology-based treatment code for this material is RMERC (roasting/retorting followed by mercury recovery). The RMERC process generates a secondary waste stream. Secondary waste streams, when greater than, or equal to, 260 mg/kg total mercury, are required to be further stabilized to a level of 0.20 mg/l using the toxicity characteristic leaching procedure (TCLP). Secondary waste streams, when less than 260 mg/kg total mercury, are required to be treated to 0.025 mg/l TCLP.

The Grassy Mountain Facility proposes to treat all of the waste, regardless of the initial concentration of mercury, to the more restrictive standard of 0.025 mg/L, or less, based on the TCLP. The Grassy Mountain Facility is proposing to treat the waste directly with a stabilization method rather than going through the initial retorting or roasting of the waste. The hardship for Clean Harbors is that there currently is no alternative way for the company to dispose of this waste. Facilities that can retort the waste stream are not permitted to treat waste that have waste codes not associated with mercury and this particular waste stream has numerous codes in addition to the code for mercury.

The Grassy Mountain Facility has conducted a treatability study on the waste stream. The treatment formula developed for this waste stream resulted in mercury concentrations below the requested concentration of 0.025 mg/L TCLP. In addition, LDR compliance will be met with all other waste codes associated with the waste prior to disposal. Clean Harbors Grassy Mountain has requested, and the Board has approved, identical and similar site-specific treatment variances in March 2009, November 2010, June 2013 and February 2015.

A notice for public comment was published in the October 1, 2015 issues of the Salt Lake Tribune, the Deseret News and the Tooele Transcript Bulletin. The comment period began on October 1, 2015 and ended on October 30, 2015. No comments were received. This variance, if granted, will be valid until November 12, 2016.

It was moved by Vern Rogers and seconded by Dennis Riding and UNANIMOUSLY CARRIED to approve Clean Harbors, Grassy Mountain, LLC request for a site-specific treatment variance to stabilize a High Mercury- Subcategory Inorganic waste stream that has the characteristic waste code D009. Shane Whitney recused himself from voting on this matter.

VII. Low Level Radioactive Waste Section.

- a. EnergySolutions, LLC request for a site-specific treatment variance from the Hazardous Waste Management Rules. EnergySolutions seeks authorization to receive Cemented Uranium Extraction Process Residues for disposal (Information Item Only).**

Otis Willoughby, Environmental Scientist, Low-Level Radioactive Waste Section informed the Board that on November 4, 2015, EnergySolutions, LLC submitted a request to the Director of the Division of Waste Management and Radiation Control for a site-specific treatment variance from the Hazardous Waste Management Rules. EnergySolutions seeks authorization to receive Cemented Uranium Extraction Process Residues for disposal.

The Mixed Waste Facility proposes to receive up to 600 cubic feet of cemented monoliths containing enriched uranium residuals. This material retains hazardous waste codes for barium, cadmium, chromium, lead and spent solvents. The generator has encapsulated the waste in concrete for security reasons. EnergySolutions proposes to receive this waste for macroencapsulation in the Mixed Waste Landfill Cell rather than chemical stabilization, as required.

This request is based on the fact that the waste has already been encapsulated in concrete at the generator's site. Treating this waste by the required method would mean grinding the waste and potentially exposing workers to unnecessary contamination. The proposed treatment will further encapsulate the waste and protect it from contact with precipitation, thereby decreasing the potential of leaching. If approved, this variance will be in effect for one year.

A notice for public comment was published in the Salt Lake Tribune, the Deseret News and the Tooele County Transcript Bulletin. The comment period began on November 10, 2015 and will end on December 9, 2015. This is an informational item before the Board. The Director will provide a recommendation at the next Board Meeting.

Tim Orton, EnergySolutions, informed the Board that since 2007 this will be the ninth time this variance request has been presented to the Board. This is a continuing ash waste stream from a DOE generator that contains enriched uranium. According to the current regulations and because of the waste contained in it, this type of waste would normally need a stabilization treatment. However, for security purposes and for transportation purposes, the DOE takes the ash and puts it in a 2 ½ gallon containers and cements it into a 16-gallon cement block monolith. What EnergySolutions actually receives is a 16-gallon cement block. EnergySolutions could shred the cement block and perform a stabilization treatment, but that would not be appropriate from a safety perspective or safe for the environment as there is radioactive material in the cement block.

EnergySolutions would like to do another treatment process, macroencapsulation, where the cement block is placed in a special vault and specially designed cement is poured on it that is less permeable than any other options available. The waste is then encapsulated in a triple-lined landfill cell. The variance request before the Board is to utilize macroencapsulation instead of stabilization as the

regulations require. Mr. Orton informed the Board that this process has worked very well with the other variance requests approved throughout the years, and no degradation has occurred.

Dr. Codell asked for clarification on the degree of enrichment of the uranium and the quantities of uranium. Mr. Orton did not know the uranium content, but noted it meets EnergySolutions licensing requirements. Mr. Orton will provide this information at the next meeting. Dr. Codell stated there are concerns regarding disposal of uranium and therefore the uranium content should be disclosed.

Otis Willoughby clarified that the regulations require a yearly variance request for this ongoing waste stream; the variance is only good for one year. For safety and security reasons, this waste will always be treated as stated above.

Raymond Wixom, Attorney General's Office, further clarified that the basis for the one year period for a variance is a statutory provision. Mr. Wixom reviewed the statute, and stated that to comply with the statute a facility can come before the Board and request a variance on an annual basis.

Mr. Orton reiterated that the DOE's position is that this is the safest, most secure and most effective way to handle this type of waste stream and they are not going to change unless they are required to do so. The volume EnergySolutions expects to receive this year is approximately 300-600 cubic feet. The total received to date at the facility is approximately 7,000 cubic feet (over a 10-year period).

VIII. Other Business.

A. Misc. Information Items.

Dennis Riding commended Ed Costomiris on his power point presentation and requested, if possible, that future presentations follow that format as it was very beneficial.

B. Schedule of Board Meetings.

Scott Anderson discussed options for future board meetings. The Board is required to meet quarterly with one meeting during the Legislative session. Board members chose to meet on the second Thursday of each month at 1:30 pm. Mr. Anderson asked the Board members to notify the Division as soon as possible each month if they will not be able to attend. It was also stated that Board members can participate via the telephone.

C. December Board meeting.

The next Board meeting is scheduled for December 10, 2015 at 1:30 pm.

IX. Adjourn.

The meeting adjourned at 2:20 p.m.